

Sierra Pacific Resources explains power plant plan to commissioners

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Sierra Pacific Resources (SPR) is moving forward with it plan to build the Ely Energy Center.

Details of the coal-fired, power-plant plans were presented to the White Pine County Commission on March 8.

According to David Sims, SPR's proposed coal-fired plant north of Ely is necessary. The power load for the Nevada Power company grows about 200 megawatts per year, and Sierra Pacific Power's load grows about 40 megawatts per year. This translates into about 2,500 additional megawatts of power that will be needed over the next 10 years. Both Nevada Power and Sierra Pacific Power are subsidiaries of SPR.

"The balance will tilt from natural gas to coal," Sierra Pacific Resources Senior Vice President Roberto Denis told the Ely Times. "It's cheaper and more reliable."

He cited large supplies of coal in the U.S. in Wyoming and Montana in an area called the Powder River Basin.

"It has been said that the Powder River Basin's coal supply exceeds the energy reserves in Saudi Arabia," Denis said.

Sierra Pacific resources and Nevada Power spent at least two years identifying White Pine County as a site to locate their next coal-fired plant. They announced the plans in January 2006.

The project has two phases.

The first phase would construct two 750 megawatt coal-fired plants about 60 miles north of Ely that burn low-cost coal. The plants are designed to burn Powder River Basin coal; it's some of the lowest sulfur coal available in the nation. Sims said the low sulfur content helps cut down on emissions. The plants will utilize super-critical units that are 5 to 10 percent more efficient than traditional sub-critical technology due to higher operating temperature and pressure. Every one-percent improvement in efficiency results in about a three-percent reduction in emissions per megawatt-hour due to a reduction in fuel consumption, he added.

The hotter the boiler, the more work is done for less energy expended. Also in Phase 1, 250 miles of transmission line would be laid to the south connecting the Sierra Pacific and Nevada Power systems for the first time, allowing them to share power. This would allow the two companies to manage their peak loads. For example, Nevada Power's demand peaks in the summer with Las Vegas air conditioning. Power from Sierra Pacific in northern Nevada could be used to fill that demand.

The first coal unit is set to fire up in late 2011 -- the second in early 2013.

Construction of two 500 megawatt coal gasification plants is slated for Phase 2. These plants are

scheduled to come online after the coal-fired plants when gasification technology becomes financially beneficial. The cooling systems for these plants would utilize a hybrid of both wet and dry cooling technologies. Sims said this technology will reduce water usage by about 50 percent. Instead of cooling using water alone, the plants would employ fans to air-cool the hot steam leaving the plants' turbines.

The two 750 megawatt coal-fired plants would consume about 8,000 acre-feet of water per year. The company has applied for water rights in Steptoe Valley, Butte Valley and Jakes Valley, but Sims said they would prefer to work with White Pine County's 25,000 acre-feet of water rights in Steptoe Valley, since it has been earmarked for coal-fired power plants.

"We have to make sure that water issues are foremost," County Commissioner John A. Chachas said.

County Commissioner Chairman Brent Eldridge explained that the White Pine Energy Station -- a separate plan by LS Power -- would probably only use 8,000 of the 25,000 acre-feet of water for its proposed coal-fired plant, leaving about 17,000 acre-feet.

Sierra Pacific Resources is working to get an air permit issued in 2007. The company plans to install air monitoring equipment this spring to measure the location's conditions in a 160-foot tall monitoring tower.

The tower is built high to increase the accuracy of readings. A Doppler radar unit will also be used to measure wind speed and direction.

The transmission line will require an environmental impact statement. Sierra Pacific Resources is preparing documents for submission to the BLM. They are also working with the BLM to acquire the land the power facilities will need -- a 2,500- to 3,000-acre site.

Sims said that Sierra Pacific Resources intends to work with White Pine County to manage its impact on traffic, utilities, schools, police and fire services. The company also plans to implement upgrades to the Nevada Northern Railway for coal transportation.

Sierra Pacific Resources estimates the project would create 1,500 jobs at the peak of Phase 1 construction, with about 150 permanent jobs afterward and 250 permanent jobs after Phase 2. Sims said the extra jobs would increase the county's tax base.

Representatives said the company intended to help the county mitigate the impact of the plants on the community in any way they could, including financially.

"We want to develop the community, and we want to be a part of it," Sierra Pacific Resources Vice President of External Affairs Mary Simmons said.

Eldridge said he would like to see a memorandum of intentions and a possible schedule for the mitigating dollars or services.

Sims said Phase 1 of the project would cost about \$3 billion.

"There are a myriad of ways to mess this up," Nevada Department of Taxation Supervisor Michael Griffin said. He recommended Sierra Pacific Resources contact his office in order to properly allocate sales taxes to White Pine County.

Part of the reason for the new SPR plant is the company's other power-generating facilities are growing older.

"We do have an aging fleet (of power plants)," Denis told the Las Vegas Review-Journal earlier this month. The Ely Energy Center is needed to replace old power plants, he added.

Eric Crawford, project manager for the White Pine Energy Station, explained to the Ely Times in a telephone interview that building a coal-fired plant will diversify Nevada's power supply. Currently, Nevada gets about 75 percent of its power from natural gas and imports a good deal of power from out of state.